

# Swiftonomics: Using Taylor Swift to Teach Supply and Demand, Exchange Rates, and Preference Reversals

Kelsey Halfen Dahlberg<sup>1</sup>, Signè DeWind<sup>2</sup>, Wayne Geerling<sup>3</sup>, Austin Green<sup>4</sup>, G. Dirk Mateer<sup>5</sup>

## Abstract

Taylor Swift is the most iconic music artist of her generation; her current Eras Tour is already the highest grossing of all time. Given her fame, fortune, and popularity among Millennials and Gen Z, Taylor Swift's career offers a myriad of opportunities for teaching economics. The impact of her career has led to a new term entering the economics lexicon: Swiftonomics (the economics of Taylor Swift, and Swift's impact on the economy). This paper provides three lesson plans that make use of the Taylor Swift phenomenon to illustrate the concepts of supply and demand, exchange rates, and preference reversals. For each lesson plan, we provide links to videos and news articles and a range of assessment activities including Kahoot!, Quizizz, and a standalone handout which can be used in-class or assigned for homework. The size, diversity, and devotion of Taylor Swift's fanbase (colloquially known as Swifties) presents economic educators with a unique opportunity to incorporate economic lessons within their current curriculum, from high school through to an introductory economics course at the college level.

**JEL codes:** A20; A21

**Keywords:** demand, exchange rates, incentives, preference reversal, property rights, risk, supply, Swiftonomics

---

<sup>1</sup> AP Macroeconomics Teacher, Dulles High School, Fort Bend ISD, Email: [kelsey.halfen@fortbendisd.com](mailto:kelsey.halfen@fortbendisd.com)

<sup>2</sup> PhD Candidate, Department of Economics, Francisco Marroquín University. Email: [signethomas@ufm.edu](mailto:signethomas@ufm.edu)

<sup>3</sup> Corresponding author: Professor of Instruction, Department of Economics, Room 2.102 B, University of Texas at Austin. Email: [wayne.geerling@austin.utexas.edu](mailto:wayne.geerling@austin.utexas.edu)

<sup>4</sup> AP Microeconomics and Macroeconomics Teacher, Milton High School, Email: [GreenA2@fultonschools.org](mailto:GreenA2@fultonschools.org)

<sup>5</sup> Professor of Instruction, Department of Economics, Room 3.102 B, University of Texas at Austin. Email: [dmateer@utexas.edu](mailto:dmateer@utexas.edu)

## 1. Introduction

In the early 2000s, the late economist Alan Krueger came up with the concept of “Rockonomics” to explain the economy through the lens of the music industry (Krueger 2019). In his best-selling book of the same name, Krueger used Taylor Swift, who released her debut album in 2006 at the age of 16, as an example of someone who employed strategies that boosted concert attendance and product sales, calling her “an economic genius.”<sup>6</sup> Within a few years of the publishing of *Rockonomics*, economists and journalists started making use of a new term to illustrate the economic impact of Taylor Swift: “Swiftonomics.” Economics reporter Augusta Saraiva said that Taylor Swift’s Eras Tour’s unprecedented ticket sales (the first concert to gross \$1 billion in ticket sales) represented a post-COVID positive demand shock in America.<sup>7</sup>

With more than 280 million Instagram followers, Taylor Swift’s music *Hits Different* with millennials and Gen-Z. Harvey Young, Dean of the College of Fine Arts at Boston University, labeled Taylor Swift a “generational talent,” likening her to the Beatles and Michael Jackson.<sup>8</sup> According to a recent Forbes poll, 53 percent of US adults describe themselves as Taylor Swift fans, and 16 percent identified as “avid” fans. Of the group which identified as avid fans, 45 percent are millennials, 23 percent are baby boomers, 21 percent are Gen X, and 11 percent are Gen Z.<sup>9</sup> The size, diversity and devotion of Taylor Swift’s fanbase (colloquially known as Swifties) presents economic educators with a unique opportunity to incorporate economic lessons within their current curriculum in both the K-12 and college introductory-level classroom.

To support instructors in delivering this material effectively, each lesson plan comprises a succinct overview of the background, embedded links to video clips and articles, clear instructions, and assessment questions which can be seamlessly integrated into an instructor’s classroom. Tailored for high school or college introductory-level classes, these lesson plans are optimally utilized as a summative assessment, ideally following the teaching of relevant concepts in the classroom. The lesson plans work best in a collaborative learning environment, but instructors have the flexibility to adapt to various assessment methods. Educators have the option to incorporate discussions and assessments directly within the videos and articles, aligning with Wooten (2020), or opt

---

<sup>6</sup> This quote was cited in Augusta Saraiva’s article, which appeared in the *Los Angeles Times*: <https://www.latimes.com/business/story/2022-11-23/what-taylor-swift-reveals-about-us-economy>

<sup>7</sup> <https://www.bloomberg.com/news/articles/2022-11-23/what-taylor-swift-reveals-about-the-us-economy?embedded-checkout=true>

<sup>8</sup> <https://www.bu.edu/articles/2023/what-makes-taylor-swift-the-pop-icon-she-is/>

<sup>9</sup> Generations defined as follows (year of birth in brackets): Boomers (1955-64), Gen X (1965-80), Millennials (1981-96) and Gen Z (1997-2012). The poll can be found at: <https://www.forbes.com/sites/marisadellatto/2023/03/14/more-than-half-of-us-adults-say-theyre-taylor-swift-fans-survey-finds/?sh=284539806877>

for the utilization of classroom response systems, as advocated by Calhoun and Mateer (2011).

## 2. Literature Review

Educators know *All Too Well*<sup>10</sup> that incorporating innovative teaching methods helps to captivate students' attention which in turn helps them retain information. Many educators have moved away from what used to predominantly be a "chalk and talk" traditional style lecture to instead adopting innovative teaching practices to make economics more contemporary, engaging, inclusive, and relevant (Wooten et al. 2021; Al-Bahrani 2022). The use of pop culture has played a central role in this transition. Most research over the past two decades has focused on using popular mediums such as film, television and music to illustrate economic concepts (Geerling 2012; Mateer 2012; Wooten 2018).

In the late 2010s, as the student cohort at high school and university crossed over from Millennial (born 1981-96) to Gen Z (born 1997-2012), many educators heeded the call to evolve from teaching millennials about economics to focusing on the next generation of students: Gen Z (Carrasco-Gallego 2017). Along these lines, an emerging strand in economics education highlights the different lifestyles and learning preferences of Gen Z (DeWind 2023; Milovanska 2024). Whereas traditional mediums of pop culture can date quickly in a world where social media platforms such as YouTube and TikTok are ubiquitous, music is enduring: its popularity remains intact over the years. The main change has been in the way music is now consumed. Digital technology and online streaming services have displaced traditional music distribution models. This provides more opportunities for artists to connect directly with their fans. There is no artist more adept at dealing with this brave new world than Taylor Swift.

Despite the fact that Taylor Swift is one of the most recognizable and popular music artists in the world, there are surprisingly few academic papers that use Taylor Swift for teaching purposes at the university level. The academic literature on Taylor Swift covers a wide range of themes including music streaming (Zehr 2021), the re-recording of albums aka the Taylor's Version project (Tilghman 2021), the imagery, language, and types of metaphors used in her music (Sloan 2021; Yastani and Susilawati 2020; Sahusilawane et al. 2023; Frida & Zuraida 2022), and celebrity role models and fandom (Hammond et al. 2022; Dajches & Stevens-Aubrey 2023; Smialek 2021). While these papers investigate different aspects of Taylor Swift's career, they are geared towards academic debates rather than for use as teaching aids in the classroom.

---

<sup>10</sup> We have embedded various Taylor Swift lyric and song title puns into this paper.

Kershner (2019) presents a lesson used in an undergraduate Latin class where students analyze popular songs from Taylor Swift and translate them into Latin. By doing this, the authors were able to remove barriers to understanding that derive from cultural differences between the Roman world and their modern world. DeWind et al. (2023) incorporate the backstories and business acumen of MrBeast and Taylor Swift in a series of teaching guides to teach foundation-level Microeconomics concepts. In doing so, they create an opportunity to generate interest, improve engagement, and ultimately help students comprehend economic concepts through stories that resonate with their generation. Geerling et al. (2024) provide a series of teaching guides on the topic of price controls, one of which looks at the unintended consequences that may have occurred if anti-price gouging laws had been implemented when tickets to Taylor Swift's Eras Tour went on sale in November 2022.

This paper aims to fill the existing void in the literature by presenting a series of lesson plans that can be used to teach foundation-level economic concepts. We build on the work of DeWind et al. (2023) and Geerling et al. (2024), but this paper differs in that it is the first of its kind to focus exclusively on Swiftonomics.

### 3. Lesson Plans

#### Lesson Plan A: Swiftonomics: Supply and Demand (Taylor's Version)

**Concepts:** supply, demand, price, goods, services, incentives, extrinsic motivation, market efficiency, competition, shortage

**Background:** In 2023, Taylor Swift launched a record-breaking world tour, released two albums, won over 25 music awards, became a billionaire, premiered the highest grossing concert film of all time, and was named *Time* magazine's Person of the Year. Her impact on the economy has been undeniable. This makes her work an excellent example when teaching the determinants of supply and demand.

**Clip:** <https://criticalcommons.org/view?m=qExEu7qxn>

**Clip Length:** 7:27

**Clip Summary:** From *Time* magazine, this video gives a good summary of Taylor Swift's impact on music, culture, fashion, entrepreneurship, and the economy in 2023.

**Related Article:** 2023 Person of the Year, Taylor Swift (*Time*)  
<https://time.com/6342806/person-of-the-year-2023-taylor-swift/>

#### Objectives

- Identify examples of how Taylor Swift impacts the economy (the US economy and the global economy).
- Describe the determinants of supply and demand.

- Discuss the concepts of incentives, efficiency, and competition as they relate to the market(s) for Taylor Swift’s music, tickets, and merchandise.

## Materials

- Video display.
- Whiteboard and markers.
- Copies of the *Time* article or access to the article online.
- Student devices to participate in Quizizz lesson.

[https://quizizz.com/admin/presentation/6579d40121df6510fcc64298?source=less\\_on\\_share](https://quizizz.com/admin/presentation/6579d40121df6510fcc64298?source=less_on_share)

## Introduction

- Launch the Quizizz lesson and give students the code to join.



- Show the *Time* video. The Quizizz begins with a quick check for understanding by asking an open-ended question: “How has Taylor impacted the economy in the last year?”
- There is an additional video after the question slide “Taylor Swift Teaches Real-Life Supply and Demand Lessons” to reinforce the concepts introduced. **Link:** <https://www.bloomberg.com/news/videos/2023-06-02/taylor-swift-teaches-real-life-supply-and-demand-lessons-video>

## Lesson Part A1: Demand

- Slide 5 has a “Taylor’s Version” acrostic to help teach the determinants of demand. The following slides have examples of each determinant and some interactive activities to reinforce the concepts.

# DEMAND (TAYLOR'S VERSION)

- SUBSTITUTES AND COMPLEMENTS
- WAGES AND INCOME
- INSTITUTIONS AND POPULATIONS
- FUTURE PRICES
- TASTES AND TRENDS



- Substitutes and Complements: Some examples of substitutes for an Eras Tour ticket might include “Swiftgating” or “Taylor-Gating” (fans tailgate outside the venue to enjoy the music during the concerts). Another example is the Eras Tour Collection and similar exhibits around the country featuring Taylor Swift costumes and memorabilia. There are many examples of complementary goods and services for concerts in general such as friendship bracelets inspired by the song, “You’re On Your Own,” leading to an entire market on sites like Etsy and Poshmark.
  - **Link:** <https://nebraskapublicmedia.org/en/news/news-articles/4750-for-taylor-swift-heres-how-much-midwest-fans-spent-on-the-eras-tour/>
- Wages and Income. Slide 9 introduces the concept of wages and income shifting demand.
  - Slide 10 has a short video explaining “funflation”: how people are using increased wages and income to purchase fun experiences.
    - **Link:** <https://criticalcommons.org/view?m=ffm56Xe3z>
- Institutions and Populations. “Swifties” have emerged as a fairly well-defined population demographic. (In this context, “institutions” refers to sociological institutions like education, where people will demand similar goods and services like other populations.)
  - Morning Consult polled self-identified “Swifties” and the illustrated profile is on slide 11.
  - Examples of goods for Swifties:
    - <https://www.seventeen.com/fashion/celeb-fashion/g34962766/taylor-swift-gifts-merch/>
- Future Prices. The idea that future price dictates current demand is exemplified by the blue crewneck sweatshirts from Taylor’s Eras Tour, which were only sold at the concert venues. These often sold out as

individuals were purchasing large quantities and reselling them online. A crewneck that retailed for \$65 would show up on sites like eBay for \$150-350. This led to UMG limiting fans to 2 of these items per person.

**Link:**

<https://www.yahoo.com/lifestyle/taylor-swifts-merch-lines-wild-133400396.html?>

- Tastes and Trends. There are so many examples of increased demand for goods and services related to Taylor Swift (clothes she wears, Travis Kelce jerseys, mirrorball items, friendship bracelets, nearly anything with her name or likeness of her image, and even the purple flower sheets which debuted in the music video for *Anti-Hero*. A fan found the sheets at Target and posted on Tik Tok, leading to Target selling out. Another example is when the writer/producer of *The Summer I Turned Pretty* reaching out to Swift to use her music in the series. This led to greater consumption of the show by Swifties.)

**Link:**

<https://popcrush.com/taylor-swift-helped-inspire-the-summer-i-turned-pretty/>

- Slide 16 introduces a video that tracks the Spotify chart history of Taylor Swift albums from 2020-2023. The video link is on slide 17. Students can watch the activity and discuss the possible events that boosted the demand for an album based on the timing of the increase in streaming.

**Link:** <https://criticalcommons.org/view?m=MpVYw4s5J>

- Slides 18-25 have a quiz/competition to test students' knowledge of the events that boosted demand for her albums during that video.

### **Lesson Part A2: Supply (continued on the Quizizz)**

- Slide 26 has a "Taylor's Version" acrostic to help teach the determinants of supply.

# SUPPLY (TAYLOR'S VERSION)



- LEGISLATION AND REGULATION
- ONLINE AND TECHNOLOGY
- VENDORS (SELLERS)
- EXPECTED PRICE
- RESOURCES

- Legislation (taxes, subsidies, and regulation). Slide 27 shows the UK Parliament and the US Senate discussing the possible regulation of ticket sellers.
  - During the November 2022 Eras Tour presale, fans had the opportunity to register for a presale code to get access to tickets on Ticketmaster. The demand for tickets was unprecedented. 3.5 million people requested codes. According to Ticketmaster, they issued 1.5 million presale codes; however, 14 million users attempted to access the website, which crashed during the first hour of the sale. A large number of tickets were purchased by resellers and listed on sites for exorbitant prices. The US Senate Judiciary Committee held a hearing to question Ticketmaster. President Biden pressured Ticketmaster and other ticket platforms to eliminate “junk fees,” which they agreed to. The Federal Trade Commission then issued a federal ban on all deceptive fees. None of these actions addressed the core issues with the November presale. The UK and French government also criticized Ticketmaster after similar issues occurred during the international sale.
  - **Link:** <https://criticalcommons.org/view?m=fOf0P9Y5v>
- Online and Technology. The consumption of music has changed with innovations in technology. Slide 31 has an animated graphic showing the change in media consumption by format as well as a video showing the technology behind the LED bracelets used at the Eras Tour and other concerts to enhance the experience.
 

Animated graphic **Link:** <https://www.visualcapitalist.com/cp/visualized-the-rise-and-fall-of-music-sales-by-format/>

LED Wristbands **Link:** <https://criticalcommons.org/view?m=V8T22eQ1e>



- Vendors (Sellers). Slide 32 introduces the “Taylor’s Version” project. Taylor Swift is in the process of re-recording her first six albums. This makes her an additional “seller” in the market for Taylor Swift music. **Link:** <https://criticalcommons.org/view?m=2naf5dpZn>
- Expected Price. Discuss the question “How does the music industry handle changes in expected price?” Slide 35 has a link to a lengthy article and accompanying podcast that discusses how the music industry is always chasing the next \$20 from music buyers. A poll question follows on slide 36 asking students how they prefer to listen to music. Students may want to discuss what comes next and whether they would be willing to pay \$20 a month for streaming if that was the only way to access music online. <https://www.theverge.com/2023/1/17/23558679/taylor-swift-music-industry-streaming-spotify-eras-tour-midnights-ticketmaster>
- Resource Prices. The Eras Tour provides many examples to explore the concept of resource prices affecting supply.
  - Slide 38 has two videos to show some examples of resources for the Eras Tour. The first video explains some of the logistics of transporting the stage and equipment. **Link:** <https://criticalcommons.org/view?m=M0pPW2MDz> The second video shows a security guard singing along with Taylor at the concert. Some fans who were not able to afford tickets to the concert instead chose to get a job at the venue, becoming a labor resource, to be able to experience the tour. **Link:** <https://criticalcommons.org/view?m=M2u5rN9NC>
  - The final slide can serve as an “exit ticket.” It asks students to identify the most interesting thing they learned about Taylor during the lesson. Student responses can help identify areas of further exploration and discussion.

### Assessment

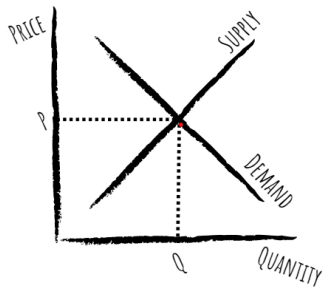
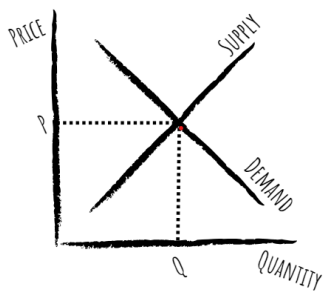
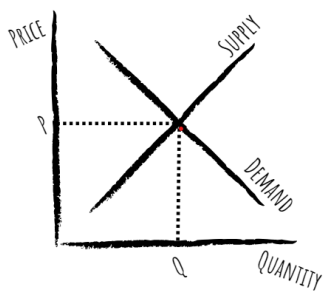
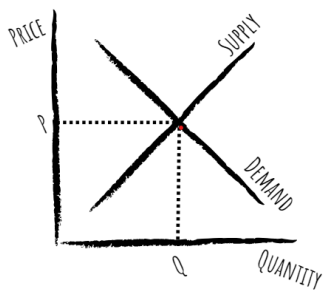
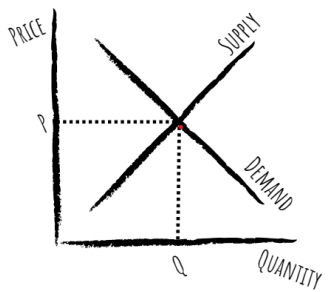
- Quizizz provides the teacher with the opportunity to evaluate student understanding of supply and demand throughout the lesson.
- After teaching students how to graph supply and demand, the attached graphing practice can be assigned for assessment.

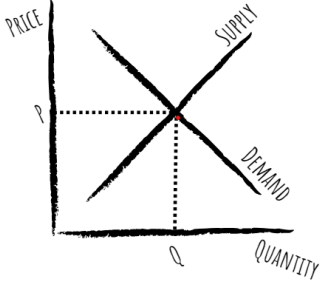
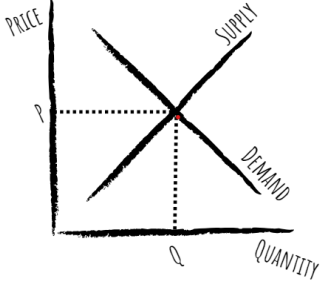
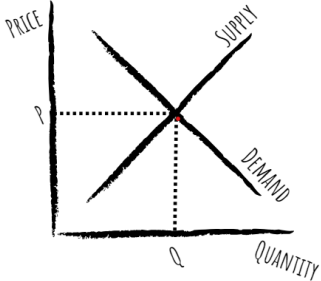
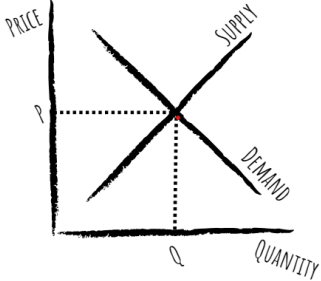


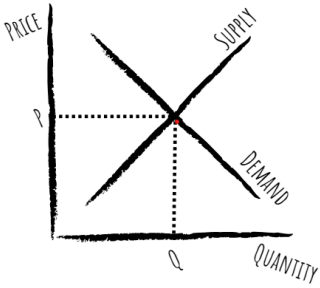
# Swiftonomics

Analyzing Supply and Demand with Taylor. Shift the curve(s) and explain.

	Graph	Change	Explanation
1		When the Eras Tour stops in a city, what happens to the demand and price for hotel rooms?	
2		Assuming Eras Tour tickets are considered normal goods, what happens to the market for Eras Tour tickets when incomes rise?	
3		What happens to the demand for John Mayer concert tickets and music as more people become Swifties?	

	Graph	Change	Explanation
4	 <p>A supply and demand graph with 'PRICE' on the vertical axis and 'QUANTITY' on the horizontal axis. An upward-sloping 'SUPPLY' curve and a downward-sloping 'DEMAND' curve intersect at an equilibrium point. Dotted lines from this intersection point lead to 'P' on the vertical axis and 'Q' on the horizontal axis.</p>	<p>If fans expect the price of a blue crewneck from Taylor Swift's official merchandise to become more expensive after the tour, what happens to the demand today?</p>	
5	 <p>A supply and demand graph with 'PRICE' on the vertical axis and 'QUANTITY' on the horizontal axis. An upward-sloping 'SUPPLY' curve and a downward-sloping 'DEMAND' curve intersect at an equilibrium point. Dotted lines from this intersection point lead to 'P' on the vertical axis and 'Q' on the horizontal axis.</p>	<p>If savvy Swifties decide to recreate the blue crewneck and sell it on Etsy, what happens to the market for blue crewnecks?</p>	
6	 <p>A supply and demand graph with 'PRICE' on the vertical axis and 'QUANTITY' on the horizontal axis. An upward-sloping 'SUPPLY' curve and a downward-sloping 'DEMAND' curve intersect at an equilibrium point. Dotted lines from this intersection point lead to 'P' on the vertical axis and 'Q' on the horizontal axis.</p>	<p>Taylor used lavender flowered sheets as a costume for a ghost in the <i>Anti-Hero</i> music video. What happened to the market for those sheets as a result?</p>	
7	 <p>A supply and demand graph with 'PRICE' on the vertical axis and 'QUANTITY' on the horizontal axis. An upward-sloping 'SUPPLY' curve and a downward-sloping 'DEMAND' curve intersect at an equilibrium point. Dotted lines from this intersection point lead to 'P' on the vertical axis and 'Q' on the horizontal axis.</p>	<p>What happens to the market for one of Taylor's original six albums when she releases a "Taylor's Version" of that album?</p>	
8	 <p>A supply and demand graph with 'PRICE' on the vertical axis and 'QUANTITY' on the horizontal axis. An upward-sloping 'SUPPLY' curve and a downward-sloping 'DEMAND' curve intersect at an equilibrium point. Dotted lines from this intersection point lead to 'P' on the vertical axis and 'Q' on the horizontal axis.</p>	<p>If the government required Ticketmaster to verify that buyers owned at least 5 Taylor Swift albums before they could purchase tickets, what would happen to the market for tickets?</p>	

	Graph	Change	Explanation
9	 <p>A supply and demand graph with 'PRICE' on the vertical axis and 'QUANTITY' on the horizontal axis. An upward-sloping line is labeled 'SUPPLY' and a downward-sloping line is labeled 'DEMAND'. They intersect at an equilibrium point. Dotted lines from this point lead to 'P' on the vertical axis and 'Q' on the horizontal axis.</p>	<p>What happened to the supply of Taylor Swift music when she started releasing her music on vinyl in addition to other forms of media?</p>	
10	 <p>A supply and demand graph with 'PRICE' on the vertical axis and 'QUANTITY' on the horizontal axis. An upward-sloping line is labeled 'SUPPLY' and a downward-sloping line is labeled 'DEMAND'. They intersect at an equilibrium point. Dotted lines from this point lead to 'P' on the vertical axis and 'Q' on the horizontal axis.</p>	<p>When Taylor removed her catalog from Spotify, what happened to the market for Taylor Swift music (which includes both digital and physical copies of her music)?</p>	
11	 <p>A supply and demand graph with 'PRICE' on the vertical axis and 'QUANTITY' on the horizontal axis. An upward-sloping line is labeled 'SUPPLY' and a downward-sloping line is labeled 'DEMAND'. They intersect at an equilibrium point. Dotted lines from this point lead to 'P' on the vertical axis and 'Q' on the horizontal axis.</p>	<p>When a new form of music consumption is invented, what happens to the market for recorded music?</p>	
12	 <p>A supply and demand graph with 'PRICE' on the vertical axis and 'QUANTITY' on the horizontal axis. An upward-sloping line is labeled 'SUPPLY' and a downward-sloping line is labeled 'DEMAND'. They intersect at an equilibrium point. Dotted lines from this point lead to 'P' on the vertical axis and 'Q' on the horizontal axis.</p>	<p>A severe storm causes widespread flooding at one of Taylor's tour stops. The government orders all public events including concerts canceled. What does that do to the market for tickets?</p>	

13		Taylor released a special edition, heart-shaped vinyl <i>Lover</i> album for Valentine's Day in 2023. What did that do to the market for music?	
----	---	---	--

**Answer Key - Swiftonomics: Supply and Demand:**

1	Increase in demand because fans need rooms near the venue, which leads to an increase in price.
2	Increase in demand due to more consumer income.
3	Decrease in demand. Another music artist's concert tickets will be a substitute good (plus, Swifties tend to not be a big fan of John Mayer, who is an ex-boyfriend of Taylor Swift).
4	Increase in demand due to expectations of an increase in the future price.
5	Increase in supply because there are more places to buy a blue crewneck.
6	Increase in demand because of a shift in tastes and trends.
7	Decrease in demand because fans want the new "Taylor's Version" of the album.
8	Decrease in demand because this would prevent many fans from trying to buy tickets.
9	Increase in supply because there are more types of media to purchase.
10	Decrease in supply because there is now one less place to stream her music.
11	Increase in supply because there is a new type of supply available.
12	Decrease in supply because when shows are canceled, there are fewer tickets and seats available on the world tour.
13	Increase in demand because the special edition products on Taylor Swift's website sell out quickly and often end up on resale websites for much higher prices.

## Lesson Plan B: Swiftonomics: Calculating Exchange Rates while Touring with Taylor

**Concepts:** exchange rates, currency, flexible exchange market, appreciation, depreciation, goods, services, shortage

**Background:** Taylor Swift has performed five international tours during the course of her career. In 2023, she launched The Eras Tour, her sixth major tour and by far her largest with over 150 shows in 22 countries. The variety of tour stops across the globe provide a fun opportunity to practice calculating exchange rates in a realistic context that students can understand.

**Clip:** <https://criticalcommons.org/view?m=xCPXxmVx3>

**Clip Length:** 7:37

**Clip Summary:** This video shows a news segment from Australia discussing Taylor's tour stops in the country. The first five minutes talk about the price of tickets with a good graphic showing the different prices in terms of Australian dollars. The second segment (5:03-7:37) discusses her economic impact on Australia. During this segment, there is a brief discussion of ticket prices.

**Related Article:** Want to See the Eras Tour? Swifties Say 'Grab Your Passport and My Hand.' (NY Times) <https://www.nytimes.com/2023/10/18/travel/taylor-swift-eras-tour-international.html>

### Objectives

- Explain why currency is exchanged in the foreign exchange market.
- Calculate the value of one currency relative to another.
- Define the exchange rate, currency appreciation, and currency depreciation.
- Define the equilibrium exchange rate, using graphs as appropriate.

### Materials

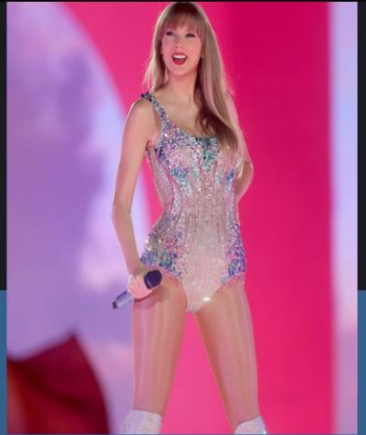
- Video display.
- Whiteboard and markers.
- Copies of the NY Times article or access to the article online.
- Student devices for Quizizz lesson  
[https://quizizz.com/admin/presentation/65776bf72ef20aff3a85ffba?source=lesson\\_share](https://quizizz.com/admin/presentation/65776bf72ef20aff3a85ffba?source=lesson_share)

### Introduction

- Launch the Quizizz lesson and give students the code to join.

# Touring with Taylor

Understanding Foreign Exchange



- Show the video. You can just show the first 5 minutes to introduce the ticket costs then come back to it later with the discussion of Taylor Swift's economic impact.
- Poll question: Is \$380 AUD a reasonable price to see your favorite artist in concert? After students have had a chance to record their answers, discuss the value of \$380 AUD in terms of US dollars.
- Word Cloud question: What are some other expenses involved with seeing a concert? Some possible discussion topics: parking, food, merchandise, transportation, travel, hotel, outfit, and friendship bracelets.

## **Lesson Part B1: Exchange Rates and Converting Currencies**

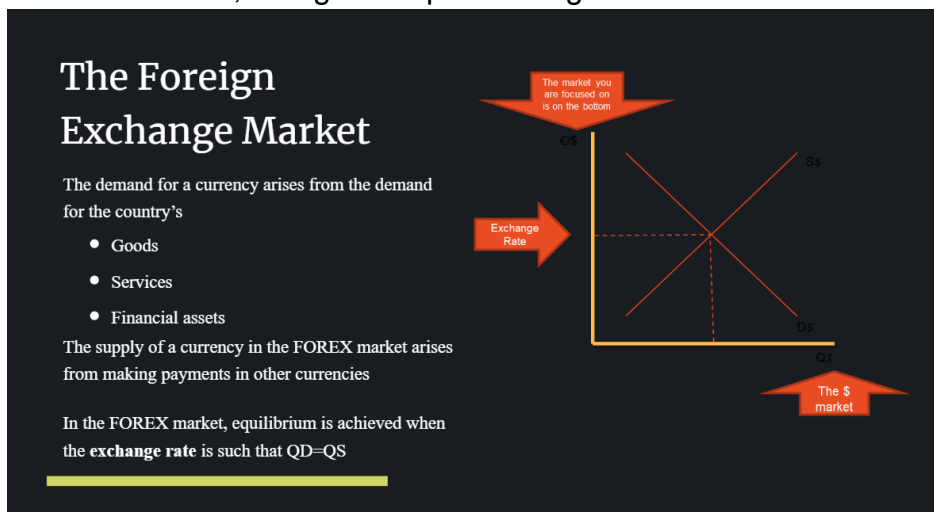
- Discuss how one currency is exchanged for another and how the price of the currency in terms of another is the exchange rate.
- Discuss the terms appreciation and depreciation in terms of currency.
- Explain how to calculate the value of one currency relative to another.  
**Link with examples:** <https://learning.treasurers.org/resources/how-to-calculate-foreign-currency>
- Explore some exchange rates and discuss how the values of major US trading partners relate to the US dollar <https://www.xe.com/currencyconverter/>

# Exchange Rates

- In the foreign exchange market, one currency is exchanged for another
- The price of one currency in terms of the other is the exchange rate
- If one currency becomes more valuable in terms of the other, it appreciates or becomes “stronger”
- If one currency becomes less valuable in terms of the other, it depreciates or becomes “weaker”

## Lesson Part B2: The Foreign Exchange Market

- Slide 7 in the Quizizz lesson has a brief discussion of the foreign exchange market. Explain the supply and demand for currency in the foreign exchange market. Some examples related to The Eras Tour might include:
  - Goods: imported merchandise like vinyl albums produced in France, CDs produced in Mexico.
  - Services: digital music downloads, plane tickets to see Taylor overseas, foreign fans purchasing tickets to a US show.



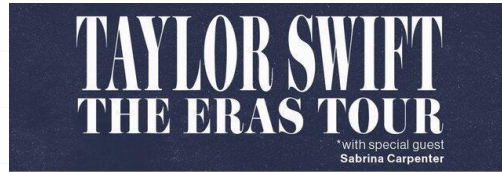
## Assessment

- The Quizizz lesson includes 18 questions that require students to calculate prices of tour-related goods and services using a list of exchange rates. Answers are included in the lesson. (Attached as a handout for students).



# Exchange Rates and The Eras Tour

US Dollar	1		
Argentine Peso	350.04	+0.019%	
Brazilian Real	4.9546	-0.75%	
Japanese Yen	150.42	-0.49%	
Australian Dollar	1.5550	-1.1%	
Singapore Dollar	1.3644	-0.52%	
Euro	0.94105	-0.93%	
Swedish Krona	11.112	-1.1%	
British Pound	0.81941	-0.76%	
Swiss Franc	0.90551	-0.51%	



INTERNATIONAL DATES

2023	24/08 Mexico City, Mexico* Austin, Texas	16/02 Melbourne, Australia* Wellington, New Zealand	15/06 Liverpool, United Kingdom Amsterdam, Netherlands
	25/08 Mexico City, Mexico* Austin, Texas	17/02 Melbourne, Australia* Wellington, New Zealand	18/06 Cardiff, United Kingdom London, United Kingdom
	26/08 Mexico City, Mexico* Austin, Texas	23/02 Sydney, Australia* Wellington, New Zealand	21/06 London, United Kingdom London, United Kingdom
	27/08 Mexico City, Mexico* Austin, Texas	24/02 Sydney, Australia* Wellington, New Zealand	22/06 London, United Kingdom London, United Kingdom
	09/11 Buenos Aires, Argentina* Lima, Peru	25/02 Sydney, Australia* Wellington, New Zealand	28/06 Dublin, Ireland Dublin, Ireland
	10/11 Buenos Aires, Argentina* Lima, Peru	02/03 Singapore* Singapore	29/06 Dublin, Ireland Dublin, Ireland
	11/11 Buenos Aires, Argentina* Lima, Peru	03/03 Singapore* Singapore	05/07 Amsterdam, Netherlands Amsterdam, Netherlands
	18/11 Rio de Janeiro, Brazil* Lima, Peru	04/03 Singapore* Singapore	06/07 Zurich, Switzerland Amsterdam, Netherlands
	19/11 Rio de Janeiro, Brazil* Lima, Peru	09/05 Paris, France Paris, France	09/07 Zurich, Switzerland Amsterdam, Netherlands
	24/11 Los Angeles, United States* Austin, Texas	10/05 Paris, France Paris, France	13/07 Milan, Italy Milan, Italy
	25/11 Los Angeles, United States* Austin, Texas	17/05 Stockholm, Sweden Stockholm, Sweden	18/07 Copenhagen, Denmark Copenhagen, Denmark
	26/11 Los Angeles, United States* Austin, Texas	24/05 Lisbon, Portugal Lisbon, Portugal	23/07 Hamburg, Germany Hamburg, Germany
		30/05 Madrid, Spain Madrid, Spain	27/07 Munich, Germany Munich, Germany
		02/06 Lyon, France Lyon, France	02/08 Warsaw, Poland Warsaw, Poland
	07/02 Tokyo, Japan Tokyo, Japan	07/06 Edinburgh, United Kingdom Edinburgh, United Kingdom	09/08 Vienna, Austria Vienna, Austria
	08/02 Tokyo, Japan Tokyo, Japan	07/06 Edinburgh, United Kingdom Edinburgh, United Kingdom	09/08 London, United Kingdom London, United Kingdom
	09/02 Tokyo, Japan Tokyo, Japan	08/06 Edinburgh, United Kingdom Edinburgh, United Kingdom	16/08 London, United Kingdom London, United Kingdom
	10/02 Tokyo, Japan Tokyo, Japan	14/06 Liverpool, United Kingdom Liverpool, United Kingdom	17/08 London, United Kingdom London, United Kingdom

visit [taylorswift.com/tour](https://taylorswift.com/tour) for more info

## Exchange Rates and Eras Tour Questions (Handout)

	Taylor Swift Item in US Dollars	Price in Foreign Currency	Foreign Currency
1	A \$100 concert ticket		Argentine Pesos
2	A \$65 sweatshirt		Brazilian Real
3	A \$25 friendship bracelet kit		Japanese Yen
4	A \$45 t-shirt		Australian Dollars
5	A \$100 concert ticket		French Euros
6	A \$35 hat		Swedish Krona
7	A \$75 hoodie		British Pounds
8	A \$250 concert ticket		Swiss Francs
9	A \$65 sweatshirt		Irish Euros

10	A \$15 CD		German Euros
11	Taylor's first stop is Buenos Aires, Argentina. When she takes off from New York, the exchange rate is posted above (1 USD is 350.04 Argentine Pesos). When she lands, the exchange rate is now 1 US Dollar to 355.17 Argentine Pesos. The Peso has _____ (appreciated/depreciated) during her flight.		
12	When Taylor stops in Brazil, she decides to take her dancers out for dinner. The bill comes to 1,859.26 Brazilian Real. Taylor needs _____ US dollars to cover the dinner.		
13	Taylor is officially a U.S. billionaire. How many US dollars would it take to be a billionaire in Japanese Yen? _____ US dollars are equal to 1 billion Japanese Yen.		
14	If a fancy stuffed kangaroo costs 244.14 Australian dollars, Taylor would need _____ US dollars to purchase it.		
15	Taylor exchanges \$5,000 US dollars for Euros to go shopping when she arrives in France. She gets _____ Euros in the exchange.		
16	When Taylor leaves Europe at the end of the tour, she exchanges 524 Euros and receives \$472.76. The exchange rate has changed to 1 USD for _____ Euros (round to 5 decimal places) and the USD has _____ (appreciated/depreciated) while she was in Europe. (look at the original exchange rate compared to the new exchange rate).		
17	A fan in Singapore buys a hoodie at the concert and pays 102.33 Singaporean Dollars. That means the hoodie costs _____ in US dollars.		
18	When Taylor returns to the United States and converts all of her foreign earnings to US dollars, that will _____ (increase/decrease) the demand for the US dollar in the FOREX market, which will lead to an _____ (appreciation/depreciation) of the dollar.		

## Answer Key - Exchange Rates and Eras Tour

1	35,004 (100 X 350.04)
2	322.05 (65 x 4.95)
3	3,760.50 (25 x 150.42)
4	69.98 (45 x 1.55)
5	94.11 (100 x 0.94)
6	388.92 (35 x 11.11)
7	61.46 (75 x 0.81)
8	226.38 (250 x 0.90)
9	61.17 (65 x 0.94)
10	14.12 (15 x 0.94)
11	depreciated (need to exchange more Pesos to get 1 USD)
12	375.60 (1,859.26/4.95)
13	6,648,052.12 (1 billion/150.42)
14	157 (244.14/1.5550)
15	4,705.25 (5,000 x 0.94105)
16	1.10838, appreciated (524/472.76)
17	75 (102.33/1.3644)
18	increase, appreciation (demand increases as she trades foreign currency for USD, increase in demand shifts the curve to the right and leads to an appreciation of the USD)

### Lesson Plan C: Swiftonomics: *Mine* Teaches Preference Reversals

**Concepts:** preference reversals, risk-taking, risk aversion, risk neutrality, expected value in decision making

**Background:** Taylor Swift's 2010 hit *Mine* reached #3 on the Billboard Top 100 chart. The video for *Mine* was the Country Music Television (CMT) video of the year for 2011. In the song's refrain, Swift sings: "You made a rebel of a careless man's careful daughter." Think about that line, keeping in mind that a "rebel" is a risk-taker. That's preference reversal. The entire song is about someone (Swift) who is normally risk-averse in relationships but falls for a guy so hard that she lets her guard down and acts differently. Instead of running away when it comes time to falling in love, she stays in the relationship. In other words, the song is about finding someone who makes you believe in love so much that you are willing to take a chance for the first time in your life.

**Clip:** [Taylor Swift - Mine - YouTube](#)

**Clip Length:** 3:56

**Clip Summary:** *Mine* begins with Swift walking into a coffee shop. When she sits down, she notices a couple arguing at a nearby table. This reminds Swift about her parents arguing when she was very young. Then the waiter drops by to take Swift's order. She looks up and dreams of what life would be like with him. We see them running together in the waves at the beach, then unpacking boxes as they move in together. Later, the two argue, resulting in Swift running away from their house and crying, just like she did when she was young and saw her parents arguing. Her boyfriend follows her, and they reconcile. They get married and have two sons. The video ends with Swift reemerging from her dream and ordering her food at the coffee shop.

**Related Article:** [All of Taylor Swift Boyfriends: Timeline of Her Dating History \(today.com\)](#)

### Objectives

- Explain why preference reversals occur and why they are important for decision making.
  - Determine the expected value of one gamble versus another. The expected value of a random variable is the sum of each possible value multiplied by the probability of each value.
  - You can use this expected value [calculator](#).
- Define risk-taking, risk neutrality, and risk aversion.
- Explain that maximizing human happiness is not simply taking the highest expected value, but optimizing your choices with respect to risk.

### Materials

- Video display.
- Whiteboard and markers.
- Access to the article online.
- Use student devices to play a Kahoot! game:  
[Learning about Expected value and preference reversals - Details - Kahoot!](#)

### Introduction

- Show the video.
- Launch the Kahoot! lesson and give students the code to join. The Kahoot! is broken into two parts: Part 1 ensures that students understand the mechanics of calculating expected values. Part 2 looks at preference reversal specifically and the role reversals play in behavioral economics.

### Lesson Part C1: Risk Preferences

- Discuss [risk taking](#), [risk neutrality](#), and [risk aversion](#).
- Explain that classical economists believed that preferences were stable (consistent), whereas behavioral economists used psychology to explain how risk preferences can change.
- Learn to calculate the [expected value](#) of various gambles.
- Using expected value as a guide, determine the risk preferences of each player based on their responses.

### Lesson Part 2 C2: Preference Reversals

- Discuss why [preference reversals](#) occur.
- Discuss the role of information and/or circumstances in causing preference reversals.
- [Maurice Allais](#) explained why some people change from being a risk taker to being risk averse as their income rises.

### Assessment

- The Kahoot! lesson includes 11 questions to help students understand preference reversals and the role that expected value plays in decision making.



- The questions are attached as a handout for students.
- The answers for instructors can be found on the page following the handout.

### Expected Value and Preference Reversals Questions (Handout)

1	Which option has the highest expected value? a. You roll a dice and win \$30 if a 6 comes up. b. You flip a coin and earn \$8 if it is heads. c. Behind one of three doors there is \$16 d. You win \$4.
---	--

2	<p>On a boat 7 out of 10 seasons are good and 3 are poor. You earn \$60,000 in a good year and \$10,000 in a poor year. The expected value (EV) is:</p> <ul style="list-style-type: none"> <li>a. \$10,000</li> <li>b. \$35,000</li> <li>c. \$45,000</li> <li>d. \$60,000</li> </ul>
3	<p>Which of these gambles would a risk averse person choose?</p> <ul style="list-style-type: none"> <li>a. A sure winnings of \$10.</li> <li>b. \$15 half the time, \$8 the other half.</li> <li>c. \$25 one-third of the time, otherwise \$0</li> <li>d. \$50 if you roll a 1, otherwise you get \$0</li> </ul>
4	<p>Which of these gambles would a risk neutral person choose?</p> <ul style="list-style-type: none"> <li>a. \$20 sure thing.</li> <li>b. \$25 half the time, \$10 otherwise.</li> <li>c. \$30 two-thirds of the time, \$2 one-third of the time.</li> <li>d. \$80 if you roll a 6, \$0 otherwise.</li> </ul>
5	<p>Which of these gambles would a risk taker choose?</p> <ul style="list-style-type: none"> <li>a. \$25 sure thing.</li> <li>b. \$40 half the time, otherwise \$10.</li> <li>c. \$100 one-sixth of the time, otherwise \$0.</li> <li>d. \$30 if you roll a 1, otherwise \$15.</li> </ul>
6	<p>Which political party do you most closely identify with?</p> <ul style="list-style-type: none"> <li>a. Democratic</li> <li>b. Independent</li> <li>c. Republican</li> <li>d. Other</li> </ul>
7	<p>Could you ever see yourself changing political parties?</p> <ul style="list-style-type: none"> <li>a. Yes</li> <li>b. No</li> </ul>
8	<p>Taylor Swift has had many famous boyfriends. Are those relationships examples of preference reversals?</p> <ul style="list-style-type: none"> <li>a. Yes</li> <li>b. No</li> <li>c. We can't be sure.</li> </ul>
9	<p>What are some considerations (other than being in love or not) when thinking about whether to break up?</p>
10	<p>Which of these would be considered a preference reversal?</p> <ul style="list-style-type: none"> <li>a. You buy a blue bicycle even though red is your favorite color.</li> <li>b. You prefer chocolate chip cookies but occasionally eat sugar</li> </ul>

	<p>cookies.</p> <p>c. You start saving for college for three years but then spend the entire amount on a senior trip instead.</p> <p>d. You open the refrigerator door to keep the eggs from falling out.</p>						
11	<p style="text-align: center;"><b>Allais Paradox</b></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">Choice 1</th> <th style="text-align: center;">Choice 2</th> </tr> </thead> <tbody> <tr> <td>A) 100% = \$1,000</td> <td>A) 11% = \$1,000 89% = \$0</td> </tr> <tr> <td>B) 89% = \$1,000 10% = \$5,000 1% = \$0</td> <td>B) 10% = \$5,000 90% = \$0</td> </tr> </tbody> </table> <p>From the image above, you must choose two outcomes. There is not a "correct" answer, so select the choices you prefer.</p> <p>a. A and A b. A and B c. B and A d. B and B</p>	Choice 1	Choice 2	A) 100% = \$1,000	A) 11% = \$1,000 89% = \$0	B) 89% = \$1,000 10% = \$5,000 1% = \$0	B) 10% = \$5,000 90% = \$0
Choice 1	Choice 2						
A) 100% = \$1,000	A) 11% = \$1,000 89% = \$0						
B) 89% = \$1,000 10% = \$5,000 1% = \$0	B) 10% = \$5,000 90% = \$0						

**Answer Key - Expected Value and Preference Reversals**

Question	Answer	Explanation
1	C	The EV for answer choice (c) is \$5.33 ( $1/3 \times \$16 = \$5.33$ ), which is greater than the EV for answer choice (a): ( $EV = 1/6 \times \$30 = \$5$ ), answer choice (b): ( $EV = 1/2 \times \$8 = 4$ ) and answer choice (d): \$4.
2	C	The EV is $\$60,000 \times 0.7 + \$10,000 \times 0.3 = \$45,000$ .
3	A	A risk averse person will always prefer a certain payoff to a gamble with a higher expected value.
4	C	A risk neutral person chooses the highest expected value regardless of the risk. Option C has an expected value of \$20.67 ( $30 \times 0.67 + 2 \times 0.33$ ). Option A guarantees \$20. Option B has an expected value of \$17.50 ( $25 \times 0.5 + 10 \times 0.5$ ). Option D has an expected value of \$13.33 ( $80 \times 1/6$ ).

5	C	A risk loving person prefers gambling with lower expected values, but potentially higher winnings over certainty. Option C offers the highest potential winnings.
6		Answers will vary. We are gathering this data to prompt the conversation that results from the next question.
7		If yes, this is a preference reversal. If not, preferences are stable.
8		We can't be sure because we do not know if this is a result of a change in her risk attitudes or after gathering more information about each other, one or both parties were ready to move on.
9		Money, the time already invested, hurting the feelings of the other person, status quo bias.
10	C	Preference reversal can be seen in intertemporal choices, where people's preferences change over time. Starting to save for college, then 3 years later splurging the amount on a senior trip is an example of this.
11		<p>All answers are acceptable. To help break down the Allais paradox, the following information is useful:</p> <p>Option A in choices 1 and 2, always pays \$390 less than option B. Selecting A and A is consistent with risk aversion.</p> <p>Option B is always the riskiest but has the highest EV. Selecting B and B is consistent with risk neutrality or risk taking.</p> <p>Flipping from A to B or B to A indicates your choice is a preference reversal.</p> <p>Allais won the Nobel prize in economics for noting that it is perfectly rational in Choice 1 to choose option A (the sure \$1,000) even though the EV (expected value) of option A is \$390 less than the EV for option B, since a risk averse person would want to avoid regret aversion (the 1/100 chance you get nothing). However, since that same person in Choice 2 faces low odds of winning, they happily choose option B because the EV is higher. This preference reversal would confound a classical economist, who believed that risk preferences are stable across all income levels, but Allais understood that people who are wealthy regularly pay insurance, while those</p>



		with low incomes regularly play the lottery, even though the odds are against them. The behavioral insight from psychology, when folded into economic analysis yields greater explanatory power.
--	--	--

#### 4. Conclusion

Taylor Swift is a music icon and generational talent. Her fanbase transcends generations: from Baby Boomers through Gen X, Millennials, and now Gen Z. This provides economic educators with a great opportunity to engage students with real world applications from Taylor Swift’s meteoric rise to fame and fortune as well as her extraordinary business acumen. These three lesson plans utilize videos and news articles to teach supply and demand, foreign exchange rates, and preference reversals in an environment which is both familiar, engaging, and relevant to our students. Each lesson plan ends with assessments that include Kahoot! and Quizizz, which are also available as standalone handouts. We build on the work of DeWind et al. (2023) and Geerling et al. (2024) but differ in that this paper is the first of its kind to focus exclusively on Swiftonomics. As the phenomena of Taylor Swift continues to grow, the scope and potential of using Swiftonomics in the classroom will broaden. This is the first paper of its kind to apply Swiftonomics to the economics classroom. Because Taylor Swift is a *Fearless* artist and entertainer, it is the authors’ hope that these Swiftonomics lessons will help fill in the *Blank Space* in educators’ curriculum in time for the start of their Fall semester in *august*. While many students may be asking themselves, “*Is It Over Now?*” when they are sitting in the midst of a boring, *Treacherous* economics lecture, these pop culture-infused economics lesson plans are sure to bring a smile to any student who is a *Lover* of Taylor Swift, whether they are a *Fifteen* year old in their first economics class in high school or whether they are taking an economics course in college at age 22.

#### 5. References

Al-Bahrani, A. (2022). Classroom management and student interaction interventions: Fostering diversity, inclusion, and belonging in the undergraduate economics classroom. *The Journal of Economic Education*, 53(3): 259-272.

Allais, M. (1953). Le comportement de l'homme rationnel devant le risque: critique des postulats et axiomes de l'école Américaine. *Econometrica*, 21(4): 503–546.

Calhoun, J., & Mateer, G. D. (2011). Incorporating media and response systems in the economics classroom. In: *International handbook on teaching and learning economics*. Edward Elgar Publishing.

Carrasco-Gallego, J. A. (2017). Introducing economics to millennials. *International Review of Economics Education*, 26: 19-29.

Dajches, L., & Stevens, A. J. (2023). Queer folklore: Examining the influence of fandom on sexual identity development and fluidity acceptance among Taylor Swift fans. *Psychology of Popular Media*, 12(3): 255–267.

DeWind, S., Geerling, W., Mateer, G. D., & Halfen-Dahlberg, K. (2023), The economics behind the billions: How Taylor Swift and MrBeast can be used to teach economics). Available at SSRN: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4640484](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4640484)

Frida, K. Y., & Zuraida, I. (2022). Metaphor in the Folklore album by Taylor Swift: A semantics study, *Ethical Lingua: Journal of Language Teaching and Literature*, 9(2): 610-618.

Geerling, W., Mateer, G. D., & Picault, J. (2024). Extreme Pricing Goes Viral: Lessons for Teaching Price Controls, *Journal for Economic Educators* [forthcoming]. Available at SSRN: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4511035](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4511035)

Hammond, A. B., Johnson, S. K., Weiner, M. B., & Lerner, J. V. (2022). From Taylor Swift to MLK: Understanding adolescents' famous character role models, *Journal of Moral Education*. DOI: 10.1080/03057240.2022.2041409

Kershner, S. (2019). What can Taylor Swift do for your Latin prose composition students? Using popular music to teach Latin poetry analysis skills, *Teaching Classical Languages*, 10(2): 48-70.

Krueger, A. (2019). *Rockonomics: A backstage tour of what the music industry can teach us about economics and life*. Currency Books: New York.

Mateer, G. D. (2012). Econ 1-0-What? *The Journal of Economic Education*, 43(4): 440.

Milovanska-Farrington, S., Geerling, W., & Mateer, G. D. (2024). Female Influencers: The economics behind the millions. *Journal for Economic Educators* [forthcoming].

Sahusilawane, C., Aritonang, P., Oraile, O., & Lekawael, R. (2023). A pragmatic analysis of deixis and reference on Taylor Swift songs, *MATAI: International Journal of Language Education*, 3(2): 103-111.

Sloan, N. (2021). Taylor Swift and the work of songwriting, *Contemporary Music Review*, 40(1): 11-26.

- Smialek, E. (2021) Who needs to calm down? Taylor Swift and rainbow capitalism, *Contemporary Music Review*, 40(1): 99-119.
- Tilghman, J. (2021). Exposing the "Folklore" of re-recording clauses (Taylor's Version), *Journal of Intellectual Property Law*, 29(2): 402-17.
- Wooten, J. (2020). Integrating discussion and digital media to increase classroom interaction. *International Review of Economics Education*, 33: 100174.
- Wooten, J., Al-Bahrani, A., Holder, K., & Patel, D. (2021). The role of relevance in economics education: A survey. *Journal for Economic Educators*, 21(1): 11-34.
- Wooten, J. (2018). Economics media library. *The Journal of Economic Education*, 49(4): 364-365.
- Yastani, U., & Susilawati, S. (2020). Imagery in song lyrics of Taylor Swift, *LINGUA: Jurnal Bahasa, Sastra, Dan Pengajarannya*, 17(2): 135-156.
- Zehr, H. (2021) An Economic analysis of the effects of streaming on the music industry in response to criticism from Taylor Swift, *Major Themes in Economics*, 23: 51-63.